Vol. 41 - No. 6 February 6, 1987

BROOKHAVEN NATIONAL LABORATORY

Landmark Status For BGRR

Brookhaven Graphite Research Reactor

The BGRR was the first reactor in the world to be built specifically for peacetime research. From 1950 to 1968, it produced a steady stream of new knowledge in the physical and

A bronze plaque bearing the above inscription and designating the BGRR as a Nuclear Historic Landmark was presented to BNL by the American Nuclear Society (ANS) last September. Last month, the plaque was permanently installed in the Exhibit Center in Bldg. 701, on the reactor's south face, as part of the BGRR display.

In a letter to Laboratory Director Nicholas Samios, ANS Executive Director Octave Du Temple explained that, to further explain the Brookhaven Reactor's place in history, the [ANS] Board had approved the following citation:

The Brookhaven Graphite Research Reactor, which first achieved criticality on August 22, 1950, was the first reactor in the world to be designed and built specifically for peacetime research. At the time of its completion, it was the world's most powerful air-cooled "atomic pile," with a design power of 28 megawatts. As a high flux source of neutrons, it proved very flexible in its adaptability to the many and varied research requirements of both the physical and life sciences. The BGRR achieved and exceeded its design levels of operation shortly after it first went critical, and operated essentially trouble-free for 18 years.

When the BGRR was placed on standby status in 1968, its uses and research applications had also exceeded those that were orginally anticipated. Work at the BGRR resulted in significant contributions to the fields of physics, chemistry, biology, medicine, engineering, materials sciences, general technology, and personnel training. End results of research at the BGRR included development of new motor oils, dating and authentication of art treasures, production of radioisotopes that revolutionized medical diagnosis and treatment, development of new and improved food crops, determination of nuclear cross sections, as well as a long list of other general and specific

Rescuers Honored at BNL/AUI Dinner

The 11 people who assisted in rescue efforts when a BNL research plane crash-landed in south Baltimore last November 8 were honored at a reception and dinner at The Johns Hopkins University on January 16, hosted by BNL and Associated Universities, Inc. (AUI).

Also on hand for the occasion were the three men who survived the crash: Chemistry Associate Daniel Leahy and Chemist Roger Tanner of BNL's Department of Applied Science, who were on board the specially outfitted aircraft collecting air samples for an acid rain study, and Pilot John Stewart, who works for Executive Fliteways Inc., Islip, the company that operated the plane for BNL. Co-pilot John Kahl was killed in the accident.

Reflecting on last month's dinner, Leahy said, "It was a very nice ceremony — it's not often that you meet the people who saved your life. And they certainly deserved the honor. I am quite sure we would have died in the wreckage if they hadn't been there."

Both Leahy and Tanner agreed, however, that it was the skill of the pilot and co-pilot that helped them survive the initial crash. "Their performance in controlling the aircraft during descent was excellent," said Tanner. "They both stayed cool and did the crash landing as well as it could be done. It was a good piloting job to be able to get that plane down without killing us all.'

The emergency that necessitated the forced landing began with the failure of the plane's left engine. The pilots brought the plane down in a field near a hospital in south Baltimore. With impact, the plane turned upside down and some small fires broke out. People on the scene reacted immediately and heroically. Without thought for their own safety, they approached the burning plane and worked to release the passengers.

Leahy recalled that, upon crashing, he had momentarily lost consciousness. When he came to, he did not realize the plane had turned over and he was disoriented. "By the time I would have regained my bearings, it would have been too late," he said. But the rescuers were able to pull



Rescuers and rescued got to know each other at the reception and dinner at The Johns Hopkins University: (front, from left) Firefighter Bartow Wooden, Robin Gibson, Charles Martin, Police Officer William Kirtz, David Bosse, (rear, from left) Pilot John Stewart, Milton Ordakowski, BNL Chemist Roger Tanner, Michael Brooks, BNL Associate Chemist Dan Leahy, Daniel Rogers, Police Officer David Jones and Police Officer Lonnie Luedtke. Police Sergeant Charles Barclay was unable to attend.

Leahy, Stewart and Tanner to safety before the plane burst into flames and was destroyed.

Acting as master of ceremonies, Laboratory Director Nicholas Samios praised the 11 heroes for their spontaneous and immediate reactions, and for the way these strangers came together and worked as one unit to save three lives. "It must say something about the spirit of the people of Baltimore," he said.

Samios's opening remarks were followed by a number of presentations to the honorees, each of whom received: a citation from the Mayor of Baltimore, William Donald Schaefer, presented by Baltimore's Deputy Fire Chief Robert Belluomo.

• a certificate from the U.S. Department of Energy (DOE), signed by Alvin Trivelpiece, Director of DOE's Office of Energy Research and presented by Charles DeLisi, Associate Director, Office of Health and Environmental Research.

- a plaque presented by Hilary Rauch, Manager of DOE's Chicago Operations Office, which oversees
- a plaque presented on behalf of BNL and AUI by Bernard Manowitz, Chairman of BNL's Department of Applied Science. The awards given to the four rescuers who are members of Baltimore's police force read, "With grateful recognition to (name) for his timely and professional actions during the rescue efforts of those involved in the aircraft accident on November 8, 1986." The other seven were cited for their "unselfish and heroic acts."

A final presentation was made to Daniel Rogers. Rogers was singled out to receive a special plaque, presented by Rauch on behalf of DOE Secretary John Herrington, because of the extraordinarily courageous acts he undertook during the rescue, particularly in attempting to free Kahl from the plane.

Admiring the plaque from the American Nuclear Society (ANS) designating the Brookhaven Graphite Research Reactor (BGRR) a Nuclear Historic Landmark are: (from left) Michael Brooks, head of BNL's Reactor Division; BNL Department of Nuclear Energy (DNE) Deputy Chairman Walter Kato, who accepted the plaque on behalf of BNL; DNE Chairman Herbert Kouts, who represented the ANS's national Honor and Awards Committee at the plaque presentation; Dmitrios Cokinos, DNE, chairman of the Honors and Awards Committee of ANS's Long Island Section; and Gerald Kinne, BNL Assistant Director for Reactor, Safety and Security. John Weeks, DNE, who chairs the Long Island Section of ANS, could not be present for the picture.

President Reagan Says Yes to SSC

President Ronald Reagan last week approved construction of the Superconducting Super Collider, or SSC, which will be the world's largest and most advanced particle accelerator.

In the SSC, two beams of protons will speed in opposite directions around a 52-mile circumference, racetrack-shaped tunnel, colliding headon with a combined energy of 40 trillion electron volts. The decision to go ahead with the accelerator was announced last Friday by Department of Energy Secretary John Herrington.

Though the SSC will be a national effort, the news was particularly welcome at BNL. Since 1983, the Lab has been developing superconducting magnets for the SSC. Approximately 10,000 magnets will be needed to focus and guide the proton beams, and, in 1985, the magnet design that BNL developed in collaboration with Fermi National Accelerator Laboratory and Lawrence Berkeley Laboratory was selected for future magnet research and development (R&D) for the SSC.

Upon hearing of the President's approval of SSC construction, Laboratory Director Nicholas Samios said, "We are very happy with the decision. We think it's a very important machine in high energy physics for both the U.S. and the world, and we anticipate exciting physics to come from it. We have been deeply involved in SSC R&D to help it come to its present state of readiness, and we anticipate continued R&D involvement."

The SSC's construction cost is estimated at \$3.2 billion, in fiscal year (FY) 1988 dollars. Estimated costs for detectors, computers, R&D and preoperations are \$1.2 billion (FY 88 dollars), for a project total of \$4.4 billion.

Details about the selection process for choosing a site for the SSC will be announced on February 10. With the requested FY 1988 start, the SSC should be completed in 1996, though the actual timetable depends on Congressional approval and annual levels of funding.

Health Plans — The Choice Is Yours



When it comes to health care, everyone seems to have different priorities. The employee with a child in college might be concerned about maintaining the student's coverage until age 23. Someone with a condition requiring continuing and expensive prescription drugs would probably want a plan that pays the full cost of that medication. And if there's a need for continuing outpatient mental health care, an employee would want a plan that pays most of those expenses.

Until now, BNL employees with these and other concerns had two health care options from which to choose their coverage — the AUI Group Medical Insurance Plan, administered by Connecticut General Life Insurance Company, or the Blue Cross-Blue Shield Community Health Plan of Suffolk (CHPS), a health maintenance organization (HMO). Now, however, as a result of 1986 changes to New York State law permitting Individual Practice Associations-Health Maintenance Organizations (IPA-HMO) to operate in the state, BNL employees may choose coverage from one of eight plans.

One of the options is, of course, the AUI plan; the other seven are state-certified HMOs. Briefly, under the AUI plan, employees can choose any physician or health care facility, and fees for services are reimbursed according to plan policies. An HMO, in contrast, provides members with a number of health services on a prepaid premium basis; the advance fee covers most health care services, though a small co-payment may be required. HMOs strive to provide preventive and routine care, in addition to care when a member is ill.

Six of the seven HMO plans are IPA-HMOs, in which members are able to select a primary care physician from a list of participating private physicians and can use any hospital where that doctor has admitting privileges. These plans are: Choice Care, Empire Blue Cross-Blue Shield Healthnet, Maxicare New York Inc., Sanus Health Plan, The Travelers Health Network and U.S. Healthcare. The other HMO plan is the Health Insurance Plan of Greater New York (HIP), a facility-type HMO that provides

medical services by HIP physicians at a HIP facility.

AUI will subsidize the cost of an HMO by paying up to the premium amount it currently pays for the AUI plan. At this time, there will be no charge for employees who enroll in any of the HMO plans, unless they are also covered by the AUI Dental Assistance Plan. Employees who enroll in an HMO and the Dental Plan will pay monthly charges of \$2 for individual and \$5.20 for family coverage.

The HMO options are limited to active employees residing in New York State, who may choose their health plans during February, for coverage effective March 1. Beginning in 1988, there will be an open enrollment period each year when employees can choose a health plan for the following year, with no limits on switching from one year to the next.

To help employees make an informed decision, a benefit comparison of all eight plans is included with a letter from Richard Schonberg, Deputy Manager, Personnel, that eligible employees will receive at their home addresses shortly. In addition, each of the HMO plans will be sending employees membership application forms and literature, including a list of participating physicians. Further, representatives of the various HMOs will be at Berkner Hall on three successive Wednesdays — February 11, 18 and 25 - between 11 a.m. and 2 p.m., to answer employees' questions.

To enroll in one of the HMO plans, employees must return the completed forms to Personnel Services, Bldg. 185, by February 27.

Employees who are currently enrolled in the CHPS HMO will also receive a separate letter explaining that, effective March 1, the Empire Blue Cross-Blue Shield Healthnet HMO replaces CHPS and summarizing the basic changes. Employees who are now CHPS members will be automatically transferred to Healthnet, unless they complete the appropriate forms for a new HMO or the AUI plan (forms available from Personnel), and return them to Personnel Services, Bldg. 185, by February 27.

Anyone wishing further information may call Personnel Services, Ext. 2877.

Speaking of Accelerators

Before a reception on January 29 honoring him as the 1986 Fermi Award winner, Senior Physicist Ernest Courant gave a talk on "The Early History of the AGS and Cosmotron." The Department of Energy had made their awards to Courant and the late M. Stanley Livingston largely for their discovery of the strong focusing principle.

In recounting how strong, or alternating gradient, focusing was developed, Courant recalled, "One of things that bothered Livingston about the Cosmotron is that the magnets all looked the same and they all had their openings towards the outside.... That limited what could be done with that machine. Also, the quality of the magnetic field got worse at very high energies, and it gets worse the same way in all the magnets, so that limits the energy. Livingston thought that if you could turn the magnets around here and there, back and forth, then the deterioration of the magnetic field would even out and you could make the machine more useful.'

Courant admitted he initially doubted this idea, but his calculations proved "that the misgivings were wrong. By making the gradients very strong and alternating them, one could make the focusing very strong. So this was a big improvement, rather than a problem. And that is what the big discovery was."

As a result, BNL's Alternating Gradient Synchrotron and other accelerators, including the Presidentially approved Superconducting Super Collider (SSC — see story, page 1), became possible. "[The SSC] is pretty much at the limit," said Courant, "It doesn't look like big, circular, strongfocusing storage rings and accelerators will go beyond that. So other ideas are being discussed . . . and



Ernest Courant

explored here at BNL [and at other labs]. Nobody knows which idea is practical for very high energies and will really dominate particle physics of the future."

— Marsha Belford

WIS Meeting

Gail Williams, Manager of the Office of Scientific Personnel and Women's Program Coordinator, will speak on "Scientific Employment Practices" at the next luncheon meeting of Brookhaven Women in Science. On Wednesday, March 11, in Room A, Berkner Hall, Williams will review the Lab's practices in hiring and promoting scientific staff. All are invited; bring your lunch.

BNL's Fabulous Forty

This is the third in a series of interviews with employees who will observe their 40th service anniversary during 1987, BNL's 40th anniversary year.

When Fire Chief Frederick Strier came here to work as a fireman, the site was known as Camp Upton, not BNL. That was in August 1945, and "I was home, in Yaphank, after being discharged from the Army Air Corps after six years of service," reports Strier, who had fought structural and crash fires at Mitchell Field before fighting in North Africa, Sicily and Italy. "I heard they were looking for civilian firefighters at Camp Upton, so I went to over to see."

Strier became one of 98 firefighters serving 48 hours on, 48 hours off and stationed in two firehouses. One, formerly situated on the corner of Princeton Avenue and Upton Road, served what was then the convalescent hospital, but now is the apartment area; and Bldg. 99, located on Railroad Street, served the rest of the site. The latter, which was to be BNL's only firehouse for many years, was torn down in 1986, replaced by Bldg. 599, the new firehouse — "the most modern thing around," states the Chief.

In 1946, Strier was transferred, along with the site, to the Manhattan District, as the Atomic Energy Commission was known, and then to the Lab when it was established in 1947. Says Strier, whose life number is 385, "I thought this was a temporary job—I never knew that the Lab would become permanent, and then I didn't think I would stay."

As Strier moved up the firefighting ranks to become Fire Chief in 1985, he watched the old firehouse and equipment grow, while the number of firefighters shrank. Today, Strier heads a group of 29, including officers. Says the Chief, "We are able to do it with fewer people because firefighters have better and more training and equip-



Frederick Strier

"Firefighting has become more sophisticated," continues Strier. "Before, all we had were barracks and woods, so structural and brush fires were our concern. Now we have laboratories and chemicals — and different fires to worry about."

The hottest fires Strier remembers were ones in a printed circuit laboratory in Bldg. 535 and in the apartment laundry, Bldg. 304. "In both those fires, it was hard to move around inside — very tight quarters," says the Chief.

Says Strier, "Overall, there's not too much difference between being a Lab firefighter and being a member of a local fire company — I get the same sense of community at the Lab as I would on the outside."

— Marsha Belford

World of Photomicrography



See Photomicrographer William Marin Jr. (center), Photography & Graphic Arts Division, this Sunday, February 8. on "The World of Photography," ABC, Channel 7, 9:30 - 10 a.m. Here, he is seen with the film crew, at last August's taping. In the sevenminute TV segment, Marin will explain the art of photographing through the microscope and how he took the award-winning images on display at BNL's Exhibit Center.

AA Meetings

Alcoholics Anonymous (AA) meetings will be held at the Lab every Tuesday at 5:30 p.m., beginning Tuesday, February 17. All employees, others with current BNL identification cards and their spouses are invited to participate. To find out the location of the meetings, call the Employee Assistance Program, Ext. 2733. As participation in AA is confidential, you will not be asked to identify yourself when making the inquiry.

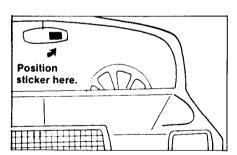
Equipment Demo

OPTECH (Optimum Technology) Sales, Inc., in association with Instrumentation Products, Inc., will display their various instrumentation and control systems on Tuesday, February 10, from 11 a.m. to 2 p.m. in Berkner Hall. These include laser alignment systems, fiber-optic temperature monitoring systems, portable TEMPEST computers, dataloggers, power and energy monitoring/control systems, gas analyzers, test equipment and pressure/temperature transmitters and sensors.

Vehicle Stickers In New Position

Vehicle stickers for 1987 will soon be available. The new one-piece stickers will be affixed to the windshield side of the rear-view mirror, so they are visible from the front of the vehicle (see drawing). As the two-color stickers will be printed on Scotch-lite paper, they will be clearly visible in the dark.

Shortly, all employees will receive a memo with registration cards. Stickers and instructions for applying them will be distributed after the cards are returned to the Safeguards and Security Division. For more information, call Hank Raimondo, Ext. 7258.



Attention Aliens

All aliens holding any type of appointment to the Laboratory are reminded that they must advise Personnel Records about changes in their visa status. Changes that must be reported include an extension of a non-immigrant visa, a change in the type of non-immigrant visa, a transfer from non-immigrant to immigrant visa and the granting of U.S. citizenship. To report such changes, contact Bonnie Miller, Ext. 2875.



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Concord String Quartet

Concord Quartet Returns For 2nd All-Beethoven Concert

In a continuation of their all-Beethoven concerts, the Concord String Quartet will perform at Berkner Hall on Friday, February 13, beginning at 8:30 p.m.

Although the Concord was scheduled to play the entire cycle of 16 Beethoven string quartets during this and the following year's concert series, the ensemble recently announced its intention to disband at the end of this season. The upcoming concert on February 13 and a later one on April 22 may be the last time local concertgoers will hear the group play together. As to how the Beethoven series will be completed next year, the Bulletin will keep you posted.

The Concord Quartet was formed in 1971, with violinists Mark Sokol and Andrew Jennings, violist John Kochanowski and cellist Norman Fischer. The membership has never changed over the past 15 years, and the Concord has a solid reputation as one of

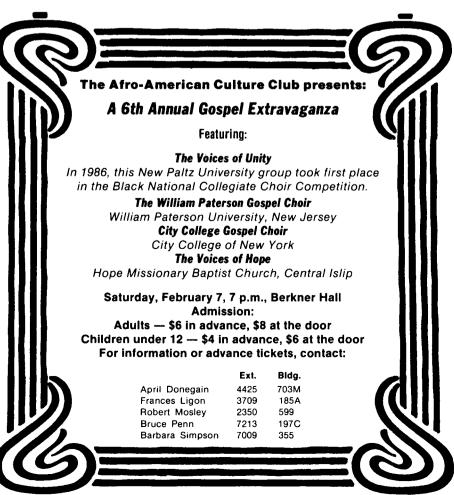
the best American string quartets. The ensemble is internationally renowned for its performances of the standard string quartet literature, as well as for the world premieres of over 70 new works.

On the February 13th program will be the so-called "Rasoumovsky No. 2" String Quartet in E Minor, Op. 59, No. 2; and the String Quartet in C-sharp Minor, Op. 131, a six-movement work played without break.

Tickets will be sold at the door the night of the performance. Prices are \$9 for general admission, \$6 for students and those over age 65, and \$5 for those under 18.

Swim Club

The Swim Club will meet on Thursday, February 12, at 5:15 p.m., for a regular practice. For more information, call Marsha Belford, Ext. 5053, or Peter Heotis, Ext. 2304.



Coming Up

Suresh Srivastava, head of the Radionuclide and Radiopharmaceutical Research Division in the Medical Department, will give the next Brookhaven Lecture, on Wednesday, February 18, at 4:30 p.m., in Berkner Hall. His topic will be, "State of the Art (and Science) of Blood Cell Labeling."

Lace-frilled hearts and flowers are the usual accessories considered suitable for February 14th. But next Valentine's Day, crime historian E.J. Wagner will stab through the romantic haze with a program entitled "Crimes of Passion." Murder for love is the subject of Wagner's dramatized presentation - blood-curdling tales from brittle romances of the 1930s, 18th century violence in Russia and medieval French legends. The program is sponsored by Brookhaven Women in Science to benefit the Renate W. Chasman Scholarship Fund. Starting at 8 p.m., February 14, in Berkner Hall, the event is open to the public. The \$5 admission tickets are tax-deductible.

Arrivals & Departures

Arrivals

Harriet J. Castro				 Fiscal
Cheng-Lin Chen.				 DNE
Allan Corby				 App. Math
Robert J. Lofaro				 DNE
Ronnie C. Mease.				 Medical

Departures

This list includes all employees who have terminated from the Laboratory, including retirees:

Angela M. Boccio Medical
Elizabeth A. Coveney DAS
Rodney T. di Girolamo Physics
Donna M. Cange DAS
Ernest A. Lange NSLS
Alfred E. Lukas S&EP
Larbi M. Nouri DAS
Jong-Yoon Park DAS
Margaret H. Thompson Medical

Cafeteria Menu

Week of February 9

Monday, February 9	
Garden vegetable soup	(cup) .75
	(bowl) .95
Tempura chicken w/1 veg.	2.80
BBQ spare ribs w/1 veg.	2.85
Hot vegetable plate (lite-weight)	2.25
Hot deli: Meat loaf	(bread) 2.45
	(roll) 2.55
	(hero) 2.65
Tuesday, February 10	
Beef barley soup	(cup) .75
zeer surrey soup	(bowl) .95
Zucchini lasagna (lite-weight)	2.65
Salisbury steak w/1 veg.	2.65
Hot deli: Roast beef	(bread) 2.55
	(roll) 2.65
	(hero) 2.75
Extra special from del	i:
Top your own baked potato	— 1.50
Wednesday, February 11	
Split pea soup	(cup) .75
	(bowl) .95
Spaghetti & meatballs w/garlic l	oread 2.95
(All you can eat & no tak	e-out)
Beef stew w/1 veg.	2.65
Hot deli: Baked ham	(bread) 2.45
	(roll) 2.55
	(hero) 2.65
Thursday, February 12	
Beef noodle soup	(cup) .75
	(bowl) .95
Chicken Kiev w/rice pilaf	2.85
Sweet & sour pork over rice	2.75
Fruit & vogurt plate (lite-weight)	2.25
Hot deli: Meatball hero	2.65
Friday, February 13	
New England seafood chowder	(cup) .75
	(bowl) .95
Fish Florentine (lite-weight)	2.85
Chicken pot pie	2.65
Hot deli: Corned beef	(bread) 2.45

(hero) 2.65

Basketball

		t Guine		
Runaways - 71		Celtics - 62		
R. Moran	22	T. Mendez 1	5	
J. Desmond	18	R. Garapolo 1	4	
T. James	14	P. Brown	8	
G. Shepherd	9	J. Gaeta	8	
M. Anerella	8	P. Ratzke	8	
		M. Falkersen	5	
		N. Schaknowski	4	
	~			

Second Came

Second Game				
Hollywood -	52	Longshots -	48	
E. Meier	19	W. Cummings	12	
D. Nordstrum	14	J. Garrison	11	
G. Mack	8	L. Walcott	10	
G. Smith	4	J. Cyr	6	
B. Gunther	3	F. Molone	4	
R. Domenech	2	S. Springstom	3	
R. Kowalski	2	R. Rowley	2	

Bowling

Pink League

High games were bowled by Maryann Reynolds 224, Donna McCambridge 162, Ellie Adams 161, Ellie Kristiansen 160.

Red/Green League

H. Arnesen rolled a 234, K. Asselta 223, L. Schairer 218, R. Adams 212, J. Connelly 211, J. Muller 210, J. Petro 208, L. Jacobson

White League

Ed Sperry IV had games of 214/202, Ron Picinich 212, Donna Riendeau 209, Sharon Smith 192, Sharon Moore 191, Kay Conkling 450l.

Purple League

Karen Vogel bowled a 211, Marge Stoeckel 209, Lee Barberich 204/203, Jeannette Thiede 201, Mary Addessi 193, Fran Brown 184, Annamarie Spira 180, Paul Callegari 235, John Connelly 213, Jim Petro 210.

Volleyball

Floaters

Standings Week of January 26

	League	I
2		

Upfagrabs	23-4
Dinkers	22-5
Xrayted	15-12
Phoubars	10-17
Net Results	6-21
Bumpers	5-22
League II	
Nuts & Bolts	20-4

Nuts & Bolts	20-4
Cannonballs	17-7
Fossils	17-7
TNT	15-6
Chunga's Revenge	8-16
Upton Ups	3-18
Misfits	1-23
League III	

20-7

4-29

routOps	19-8
Printouts	19-11
Screwballs	13-14
Sourcerers	12 - 15
Not Yets	10-20
Odd Couples	6-21
Open League	
Phoenix	30-3
Dakota	99-4

Phoenix	30-3
Dakota	29-4
Odds & Sods	19-14
Target	16-17
Rowdy Radicals	15-18
Court Jesters	14-19
Duituits	5-28

Classified **Advertisements**

Placement Notices

Out of Control

The Laboratory's placement policy is to select the best-qualified candidate for an available posi-tion, with consideration given to candidates in the following order of priority: (1) present employees within the department and/or appropriate bargaining unit, with preference to those within the immediate work group; (2) present employees within the Laboratory as a whole; and (3) outside appli-cants. In keeping with the Affirmative Action plan, selection decisions are made without regard to age, race, color, religion, national origin, sex, handicap or veteran status.

Each week, the Personnel Office lists new personnel placement requisitions. The purpose of these listings is, first, to provide open placement information on all non-scientific staff positions; second, to give employees an opportunity to request consideration for themselves through request consideration for themselves through Personnel; and, finally, for general recruiting purposes. Because of the priority preference policy stated above, each listing does not necessarily represent an opportunity for all candidates. As a guide to readers, the listings are grouped according to the anticipated area of recruitment.

Except when operational needs require otherwise, positions will remain open for one week following publication date.

For further information regarding a placement

For further information regarding a placement listing, contact the Employment Manager, Ext.

THE VACANCIES LISTED BELOW HAVE BEEN EXEMPTED BY THE DIRECTOR'S OFFICE FROM THE CURRENT FREEZE ON OPEN REQUISI-

LABORATORY RECRUITMENT - Opportunities

for Laboratory employees only

2537. SECRETARIAL POSITION - Will provide secretarial and administrative support to the Fiscal Officer. Responsibilities will include but not be limited to the following: preparation of correspondence for Fiscal personnel, preparation of financial and other reports, handling of private and confidential matters, and maintenance of all files and manuals. Requires an AAS or equivalent capabilities, excellent secretarial skills, extensive knowledge of Laboratory policies and procedures, demonstrated organizational abilities, excellent oral and written communication skills, and word processing experience (MICOM desirable). Familiarity with the preparation of financial reports highly desirable. Fiscal Division.

2538. SECRETARIAL POSITION - Requires AAS degree or equivalent, excellent communication skills, and a comprehensive knowledge of BNL policies and procedures to perform diverse secretarial duties for the Head of the Structural Analysis Division. Duties include the preparation of technical reports and correspondence on a MICOM word processor, travel arrangements (domestic and foreign), maintenance of Division files and supervision of secretarial personnel. Department of Nuclear Energy.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside applicants.

2539. SPECIAL ASSISTANT TO THE ASSO-CIATE DIRECTOR - Reports to the Associate Director for Management and Physical Plant. Requires BS/MS in engineering, proven supervisory experience, knowledge of plant engineering construction programs and experience with facilities design and facilities construction contracts. Will be responsible for assisting in the preparation of: GPP and other construction programs, the development of long-range project plans, and in the development of the master site plan. Will interface with departments and divisions concerning longrange facility needs. Please submit resume to Robert D'Angio, Personnel Division, Bldg. 185, Director's Office.

2540. PROGRAMMER POSITION (1 year term) Requires BS in computer science or electrical engineering and a minimum of two years' programming experience in machine language on DEC hardware. Knowledge of CAMAC interfacing and electronic hardware very desirable. Will be responsible for the design, programming, testing and implementation of data collection packages for all EXXON beamlines. National Synchrotron Light Source Department.

2541. TECHNICAL POSITION - Requires AAS in optics technology plus two to five years' experience in handling and use of mirrors, beam splitters, optical detectors, operation and use of com-mercial lasers, etc. Working knowledge of dye lasers and common laboratory equipment (e.g., oscilloscopes, power supplies, etc.) is desirable. (Reposting of Job No. 2458). Department of Nuclear Energy.

2542. HEAVY EQUIPMENT MECHANIC OPER-ATOR - Requires demonstrated ability to maintain, repair and operate all material handling, earthmoving, road and ground maintenance and related equipment. Candidate must have a valid Class I license. Plant Engineering Division.

2543. TECHNICAL POSITION (term position to 9/31/87) - Requires AAS in chemistry plus two years' experience. Will perform routine analytical chemistry duties in support of research projects in human health and environment monitoring. Duties include titrations, precise preparation of standard solutions, quantitative measurements, preparation of analytical samples, glassware, recordkeeping. Microcomputer familiarity desirable. (Reposting of Job No. 2516). Safety and Environmental Protection Division.

Autos & Auto Supplies

75 MGB - running parts car, \$300./neg. Mark, Ext. 2043 or 821-3169

68 MUSTANG - 289-8 cyl., a/t, 2 dr., body very good cond., mint interior, runs well, must see Joan, 331-9264 after 6 p.m.

EARLY BUICK/JEEP V6 PARTS - blocks, heads, pistons, etc. Bill S., Ext. 4434 or 399-6168.

82 HONDA PRELUDE - 5 spd., a/c, stereo cass., many extras, 55k mi., asking \$5,250. 473-1761.

76 PONTIAC VENTURA - 260-V8, 4 dr., a/c, p/s, p/b, a/t, r/h, \$375. Ext. 4532.

78 CHEVY NOVA - 2 dr., new a/t, p/s, p/b, a/c, 6

cyl., best offer. Ext. 2319 or 821-0260. SNOW TIRES - 13" on Dart Valiant rims, almost

new, \$140. Ken, 289-8212. 84 MERCURY MARQUIS BROUGHAM - 52k mi.,

perfect cond., \$4,995. Ext. 5400 or 874-3447

86 JEEP CHEROKEE - 4 cyl., 5 spd., a/c, stereo, laredo pkg., 30k mi., \$14,800. 475-4792 after 5 p.m.

79 CHEVY CAPRICE - 9 passenger wagon, p/s p/b, a/t, a/c, good engine & tires, some body rust, needs work, make offer. 331-5912 eves.

79 MUSTANG II - good tires, new exhaust, high mileage, asking \$990. Loretta, Ext. 4411.

77 PONTIAC CATALINA - 4 dr., 17 mpg. looks good, runs well, orig. owner, \$990. Sandy, Ext. 3369 or 286-1022.

83 HONDA - good shape. 286-8718.

70 DODGE PICKUP - w/8' slide on camper, sleeps gas heat/stove, sink, ice box, camper clean, truck dependable, reasonable, 286-0064

75 CAMARO - 6 cyl., rebuilt engine, stereo, 4 wire wheels w/raised lettering, \$2,500. Ext. 2529.

81 OLDS DELTA - 88 diesel. Dave, Ext. 7921

79 PONTIAC SUNBIRD - 4 cyl., 4 spd., sunroof, new paint, \$500. Bob. Jr., 698-9234 eves. 78 DODGE OMNI - 4 dr., p/s, p/b, asking \$550.

653-8703 76 LTD - a/t, am/fm, new tires, exhaust system,

asking \$150. Ext. 3166 days/3202 eves. 71 CHEVY MALIBU - 2 dr., 307 eng., a/t, p/s, orig.

owner, \$550. Gordon, Ext. 3216. STELLAR GO-CART - very good cond., new 5 HP Briggs & Stratton, needs nothing, asking \$300.

Ext. 3081 or 399-3598. 78 COUGAR XR-7 - 351, excel. cond., blue, am/fm cass., a/c, new tires, \$2,300. Bert, Ext. 2050.

81 FORD ESCORT - htchbck., am/fm cass., 4 spd.,

37k mi., excel. cond., must see, \$2,000. 878-1283.

83 PLYMOUTH RELIANT - new tires, brakes, McPherson struts, exhaust, 4 dr., 30 mpg. Ext. 4428 or 467-4222.

86 GMC PICKUP - loaded, 13k mi., highrise cap, running boards, must sell, sacrifice, \$12,500. Ext. 2050 or 273-4359.

84 BUICK SKYHAWK - 2 dr., am/fm, a/c, p/s, p/b, sunroof, rear defrost, \$5,700. 938-0584 eves.

RADIOS - Ford & VW's, \$7./ea. Mike, Ext. 2705.

78 CUTLASS - p/s, p/b, a/c, 5 spd., manual trans., good throughout, \$1,000 neg. Ext. 3930 or 286-2854.

79 OLDS CUTLASS CALAIS - runs like new, all power, posi-traction, very clean, asking \$1,990. Ext. 4867 eves.

75 PEUGEOT WAGON - a/c, am/fm, a/t, 18-20 mpg, runs well, \$750. Ed, Ext. 2007 or 751-1474/689-6131.

81 CHEVETTE - 2 dr., htchbck., new water pump, brakes, timing belt, sunroof, muffler, am/fm cass., a/t, 60k mi., \$800. Gary, 758-5592.

83 YAMAHA VIRAGO - 750, black, \$2,000; 80 Honda CX500, 10-mile, \$1,000. both mint cond., garaged. Charles, Ext. 7749 or 789-1744.

81 CHEVY - 4 dr., 4 cyl., am/fm, a/c, \$1,000; 82 Dodge Aries wagon, 4 cyl., am/fm cb, am/c, trailer hitch, \$3,500. 654-1146 after 5 p.m.

Boats & Marine Supplies

28' OWENS - 1963, wood, tight hull, engine needs work, forced to sell, \$500. Bert, Ext. 2050.

Miscellaneous

wknds.

ZENITH COMPUTER MONITOR - composite monochrome, STB Graphix Plus II video board for IBM PC. Paul, Ext. 3372.

PC MONITORS - RGB w/color graphics card, \$300; Amber TTL w/hercules card, \$200. Alan, Ext. 2928 or 821-1389.

WASHER & DRYER - Sears, electric, 3 yrs. old., excel. cond., \$400. Ext. 4846.

SKIS - Rossignol, 170, never used, \$75. 928-1445

ARM SAW - Sears radial, 10", \$150. firm. Ken, 289-8212. FREEZER - Sears, frost-free, 19 cu. ft., \$150; Sea

Devil sailboat, needs sail, \$25; child car seat, \$15.

HUMIDIFIER - like new, \$10; 2-way three-speed fan, good running cond., \$10. Ext. 7505. TV - Magnavox, 19", black & white, excel. cond.,

\$45. Mel, Ext. 3349. LAWNBOY MOWER - good cond., \$80; metal workbench legs, \$10. Ed, Ext. 4447.

FIREWOOD - approx. 34 cord, cut to fireplace length, best offer. Ext. 4428 or 467-8297 eves and

WOODEN GUN CABINET - \$20; round formica coffee table, \$10; rolling mahoghany TV table, \$15. 878-0874.

COFFEE TABLE - 54" x20", like new, \$35. 475-4787 after 6 p.m. DRYWALL NAILS - 13/8" long, coated, 29 pounds,

\$10. Rick, Ext. 3922. FURNITURE - Bassett, boy's bedroom set, dresser, desk, chair, hutch, night table, good cond.,

\$150. Mark, Ext. 2957 or 331-2270. BAND SAW - metal cutting, 4x6" less motor, like new, \$150; (4) old sturdy chairs, \$50. 878-6637.

FIREHOSES - (2) 50', clean cond., only used to pump out water, \$25/ea. 727-5455.

PLAYPEN - like new, \$30; baby gate, \$2. Ady, Ext, 4531 or 331-3785.

BABY ITEMS - carriage, stroller, potty chair, vaporizer, elec. space heater, drapery rods. S. Spark, Ext. 4111.

KEROSENE HEATER - Sunbeam, new, 20 Btu, \$90; automatic humidifier, \$50; 9x8' carpet, orange, all in excel. cond., Ext. 2683.

JEWELRY - rings, necklaces, bracelets, good costume jewelry, will come to show. Whitey, Ext. 2913.

CASTRO CONVERTIBLE - loveseat & ottoman, both open to single bed, \$200/pr.; early Amer. loveseat w/match. drapes, \$175. 928-1942 eves.

COMPAQ PORT, COMPUTER - w/2 360KB floppies, 640k, AST 6-pak, dos-basic, word proc., data base, ask. \$1,200. Alan, Ext. 2928 or 821-1389.

MAIL BOX - never used, w/steel stand, \$7; upright piano, white, \$200. Steve, Ext. 3988 or 286-2151.

CERAMIC EARRINGS - hand crafted, original design, unique gift, \$8.-10./pair. Gene, Ext. 3080

UTILITY TRAILER - single axle, 5x9' bed, \$500; B&W 18" Admiral TV; color 20" RCA XL100, make offer. Ext. 5234 or 286-3377

HUMIDIFIER - crib, mattress, 751-4539

water pump. 286-8718.

DINING ROOM TABLE - 60", 4 chairs; china server; electric guitar, Z shape, good cond., hardshell case, \$125. firm. Pat, 744-8512 eves.

COMPUTER - Apple II+, loaded with cards, 80column word processer, software games, \$675. Jerry, Ext. 2934 or 744-2816 eves.

PUPPY - Jack Russell terrier, born 12/86, very healthy, home bred, all shots, adorable. 286-0064. PARAGON OIL BURNER - used once, shallow

CAMERA LENSES - wide angle & telephoto, for 35mm SLR, Zykkor Series 7, \$30. Ext. 3894 or 744-9812.

SPEAKERS - Magnepan Timpani I-D, 5 yrs. old., perfect cond., paid \$3,800, selling for \$1,000. 369-0236 eves.

CAMERA - Vivitar PS35, auto focus, w/gadget bag, excel. cond., \$50. Ext. 3894 or 744-9812.

DISHWASHER - GE, portable, excel. working cond., \$75. or best offer. 399-0428 after 6 p.m.

Free

DWARF RABBIT - good family pet, tank included.

Car Pools

E. NORTHPORT - LIE exit 52 or East Northport, 8:30-5:00 shift, paying rider. Renee, Ext. 3304.

Real Estate

Real estate advertised for sale or rent is available without regard for the race, color, creed, sex, or national origin of the applicant.

For Rent

HILTON HEAD, SC - 2 bdrm. condo, sleeps six, beach, golf, tennis, many extras, great weather, \$300/wk. 585-9149.

HOLBROOK - brand-new 31/2 rooms, extra storage closets, pvt. ent., quiet residential area, walking distance to stores, \$575 inc. util. Ext. 2529 or 588-

MIDDLE ISLAND - Artist Lake condo, 1 bdrm., I/r, kit., full bath, a/c, new w/w, dishwasher, redecorated, pool, heat incl., 5 min to Lab., avail. immed., \$650. Ext. 3144 or 698-5046 eves.

SHIRLEY - 2 bdrm., I/r, eik, full bath, w/w, walk to beach, working couple, ref., sec., \$675. incl. all.

N. SHIRLEY - 3 bdrms., eik, I/r, 2 full baths, finished bsmnt., cable, garage, appliances, 5 miles to Lab., \$1,000. incl. util. Ext. 4512 or 281-4003. CENTER MORICHES - waterfront, gorgeous view,

3 bdrms., large I/r & family rm., 1/3 acre. Ext. 5277 or 549-5802. NORTH SHIRLEY - unfurnished 2 bdrm. house, formal d/r, eik, l/r, bsmnt., garage, w/w, located on quiet dead-end street. \$750. heat incl. Ext. 4482.

For Sale

PORT JEFFERSON - Three Village School district, 4 bdrm., 21/2 baths, den, bsmt., 1/3 acre wooded lot, \$210,000. 928-0281.

PORT JEFFERSON - 4 bdrm. Colonial, 21/2 baths, I/r, d/r, eik, partly finished bsmt., deck. Ext. 4674 or 473-5331.

POCONOS - 3 bdrm. chalet, I/r, d/r, family rm., w/wood burning stove, kitchen, w/w, garage w/elec. door opener, circular driveway, paved roads, pools, lake, clubhouse, tennis, all entrances guarded 24 hrs., more, \$115,000. neg. 286-4652.

DELRAY BEACH, FL - 2 bdrm. condo, 2 bath, appliances, enclosed porch, many improvements, semi-attached, near water, clubhouse, sauna, sports, \$38,000. Ext. 4192 or 751-7787.

ROCKLEDGE, FL - beautiful block & stucco house, 2 bdrms., 2 baths, d/r, kitchen, family rm., combination porch, 2 car gar., many extras, 75x115 lot, excel. loc. 305-631-2840.

BOHEMIA - 2 bdrms., all new bath, new appliances, new Andersen windows, skylight, mint. \$133,000. 567-1592 after 5 p.m.

Wanted

district. 744-2275.

SHOP MANUALS - 1978 AMC, 1977 Ford Maverick, 1972 Chevrolet Van, reasonable prices. 727-

COMPUTER GAMES - for Apple II. 744-2275. HOUSE TO RENT - family of four, SWR school

SKIERS - to Hunter Mt., Wed. Feb. 18, \$36. incl. bus & lift, space limited. Augie, Ext. 3884. ROWING MACHINE - Oxy-Acetylene torch kit,

complete; ac generator, 1.5-3.0 kW; motorcycle trailer, 1 or 2 bike. 286-0064. ICE SKATES - men's size 12; large squirrel or rat

traps. Ext. 2346. SINGERS - soprano & tenor for on-site octette. Janet, Ext. 2345, John, Ext. 2617.

ROOMMATE - female to share expenses, large house, washer, 2 car garage, 10 min. to Lab, Yaphank, \$400./all. 924-6651.

CAMPBELL'S SOUP LABELS - for church youth group. Paul, Ext. 2350 or mail to Bldg. 599.

APT/HOUSE - 1-2 bdrms., couple w/1 child, near Lab, less than \$550. Tomi, Ext. 5615

Services are listed as courtesy to BNL employees. They are neither screened nor recommended by the Bulletin.

CALLIGRAPHY - for all occasions. Andrea, 821-

JEWELRY REPAIR - gold & silver, Dan, Ext. 2319. SEAMSTRESS - clothes made & altered, reasonable prices. Donna, Ext. 4430 or 369-2332.

TRAINS REPAIRED - "0" & "027" gauge Lionel & A.F., and/or restored. Jack, 588-0910

TYPING - reasonable rates, fast & accurate. Ext. 2484 or 758-6241 after 6 p.m. CLOTH PAINTING - by hand, different designs, made as wanted, on T-shirts, dresses, etc. Noemi,

Ext. 3073. BRICKWORK - walks, patios, Belgian block, swim pools, landscape ties, licensed & insured. Tony,

LAND CLEARING - using excel. rake on JD 450 track loader; \$55./hr. with operator. Tom, Ext. 4084 or 878-1060.

FIRESIDE CHIMNEY SWEEPS - wood, coal, oil flues, stainless steel, relinings & caps, fireplace accessories. Mike, 821-9690.

MOVIE TRANSFER - 8mm or Super 8 movie film to VHS tape, reasonable. 467-8297 after 6 p.m. or wkends.

HOME REPAIR - improvements, no job too small. Homeworks, Cris, 758-4919.

MAGICIAN - children's parties, sculptured balloons, Lab discount. 395-3963 after 6 p.m.

BABYSITTER - your home, during working hours, experienced, 736-6388 days & eves TAXES - prepared by tax consultant, your home or

mine, reasonable. John, 732-2472. PLUMBER - licensed, for all heating & plumbing

needs. Mike, Ext. 2841 or 369-1597.

SHEETROCKING - spackling, free est. Kevin, 563-1189

Classified Ad Policy Deadline is 4:30 p.m. Friday for publication Friday of the next week.